MENU PLANNING:





Calculating Meat/Meat Alternates and Grains for SY 2016-17

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2016 Summer Workshops

Missouri Department of Elementary and Secondary Education

Outline

- Quick Review of Meal Pattern
- 2. Calculating the Meat Component
- 3. What Are Grains?
- 4. Calculating the Grain Component
- 5. New Tools!
- 6. Q & A





Breakfast Meal Pattern





Review of SBP Meal Pattern

Meal Pattern	K-5 Daily	6-8 Daily	9-12 Daily
Fruit (5 cups weekly, grades K-12)	1 сир	1 сир	1 cup
Vegetables	0	0	0
Dark Green	0	0	0
Red/Orange	0	0	0
Beans/Peas	0	0	0
Other	0	0	0
Grains (oz. equivalent)	1 oz eq.	1 oz eq.	1 oz eq.
Meat/Meat Alternates (oz. equivalent)	0	0	0
Fluid Milk (cups)	1 cup	1 сир	1 cup



Dietary Specifications (Breakfast)

Saturated Fat (% of total calories)					
Grades K-5 Grades 6-8 Grades 9-12					
< 10%	< 10%	< 10%			

Trans Fat

ALL Grades

Nutrition label or manufacture specifications must indicate <u>zero</u> grams of trans fat.

Sodium (mg)				
Grades K-5 Grades 6-8 Grades 9-12				
≤ 540	≤ 600	≤ 640		



Grains

	Grades K-5	Grades K-8	Grades 9-12		
Meal Pattern	Amount Required Per Week (minimum per day)				
Grains (oz eq)	7 (1)	8 (1)	9 (1)		



NOTE: Although all grades have the same DAILY requirement, they do not share the same WEEKLY requirement. If using a K-8 or 9-12 meal pattern, you must meet the weekly minimum requirement for the older grade level. For example, if using a K-12 meal pattern, you must be sure to offer AT LEAST 9 oz equivalents of grain during the week.



Meat/Meat Alternates

The School Food Authority (SFA) may count meat/meat alternates towards their weekly grain requirement, but <u>ONLY</u> after they have met the daily minimum grains requirement.

Example: You offer a biscuit and a sausage link. <u>IF</u> the biscuit credits for at least 1 oz equivalent of grain, then you can also credit the sausage link as an additional grain, and this will count toward your weekly meal pattern requirements for grains. If the sausage link would have credited for 1 oz eq. M/MA, then, for the purposes of breakfast, it would credit as 1 oz eq. of grain, and you would have offered 2 oz eq. grain for that day.

However, if you'd only served two sausage links, then you would have offered ZERO creditable grains that day. You must serve a grain for the M/MA to count.



Vegetables

For breakfast, vegetables may be substituted for fruits, but the *first two cups* per week of any such substitution must be from the:

- Dark Green
- Red/Orange
- Beans/Peas (legumes) or
- "Other Vegetables" subgroups.





Lunch Meal Pattern





Review of NSLP Meal Pattern

Meal Pattern	K-5 Daily	6-8 Daily	9-12 Daily
Fruit	½ cup	¹⁄₂ cup	1 cup
Vegetables	³ / ₄ cup	³ / ₄ cup	1 cup
Dark Green	-	-	-
Red/Orange	-	-	-
Beans/Peas	-	-	-
Starchy	-	-	-
Other	-	-	-
Grains (oz. equivalent)	l oz eq.	1 oz eq.	2 oz eq.
Meat/Meat Alternates (oz. equivalent)	1 oz eq.	1 oz eq.	2 oz eq.
Fluid Milk (cups)	1 cup	1 cup	1 cup



Vegetable Subgroups

Subgroups	Grades K-5	Grades 6-8	Grades 9-12
Dark Green	¹∕₂ cup	¹∕₂ cup	½ cup
Red/Orange	³ / ₄ cup	³ / ₄ cup	1 ½ cup
Beans/Peas (Legumes)	¹∕₂ cup	¹∕₂ cup	½ cup
Starchy	¹∕₂ cup	¹∕₂ cup	½ cup
Other	¹∕₂ cup	¹∕₂ cup	³ / ₄ cup
Additional Veg. (Not a subgroup)	1 cup	1 cup	1 ½ cups
TOTAL	3 3/4 cups	3 3/4 cups	5 cups

NOTE: There is *NOT* a daily requirement for any of the subgroups. The subgroups requirements are for the <u>WHOLE WEEK</u>.



Meat/Meat Alternates (M/MA) and Grains at Lunch

Meat/Meat Alternates (min. requirements)				
Grades K-5 Grades 6-8 Grades 9-12				
1 oz eq. daily (8 oz eq. weekly)	1 oz eq. daily (9 oz eq. weekly)	2 oz eq. daily (10 oz eq. weekly)		

Grains (min. requirements)					
Grades K-5 Grades 6-8 Grades 9-12					
1 oz eq. daily (8 oz eq. weekly)	1 oz eq. daily (8 oz eq. weekly)	2 oz eq. daily (10 oz eq. weekly)			

Calories (range requirements)					
Grades K-5 Grades 6-8 Grades 9-12					
550 – 650	600 – 700	750 - 850			



Dietary Specifications (Lunch)

Saturated Fat (% of total calories)					
Grades K-5 Grades 6-8 Grades 9-12					
< 10%	< 10%	< 10%			

Trans Fat

ALL Grades

Nutrition label or manufacture specifications must indicate <u>zero</u> grams of trans fat.

Sodium (mg)				
Grades K-5 Grades 6-8 Grades 9-12				
≤ 1,230	≤ 1,360	≤ 1,420		



- Example) Let's say that you want to make hamburger patties, and you want to make sure that each patty will credit for 2 oz equivalents M/MA. You have 60 students. How much *raw* beef will you need in total?
 - The beef being used is 85/15 (commodity).
 - Continued on the next slide...



First we need to calculate the "yield"...

Credited Amount
Yield (oz eq.)

Raw Amount (oz)

From the Food Fact Sheet, we can see that 1.34 oz (raw) will credit for 1 oz eq. M/MA.

YIELD = 1 oz eq. / 1.34 oz (raw), which = 0.746

Yield (%) = 0.75



Now that we know the yield (0.75 aka 75%), we can use that to calculate the amount of raw 85/15 beef we would need, in order to produce 60 patties that credit for 2 oz eq. M/MA.

60 patties X 2 oz eq. per patty = 120 oz equivalents M/MA needed

120 oz eq. / 0.75 (yield) = 160 oz raw beef needed



Raw Amount (oz) x Yield = Credited Amount (oz eq.)



We now know that in order to produce 60 hamburger patties, which credit for 2 oz equivalents M/MA each, that we will need to use 160 ounces of raw beef.

Now, how can we figure out how much each patty must weigh? Since we already know we want a patty that contributes 2 oz equivalents M/MA, this will be simple. There are 2 ways to do it.

Method #1

Since you already know how much raw product is needed, just divide the raw amount by the number of patties you're making.

2.67 ounces

Ex) 160 ounces raw beef ÷ 60 patties = per patty

Method #2

Do the same method we used to calculate our raw product. (Creditable Amount / Yield = Raw Amount)

Ex) 2 oz eq. $M/MA \div 0.75$ (yield) =

2.67 ounces per patty



Food Buying Guide

Section 1-Meat/Meat Alternates					
1. Food As Purchased, AP	2. Purchase Unit	3. Servings Per Purchase Unit, EP	4. Serving Size per Meal Contribution	5. Purchase Units for 100 Servings	6. Additional Information
BEEF CHUCK ROA	BEEF CHUCK ROAST, fresh or frozen ⁵ (continued)				
Beef Chuck Roast, fresh or frozen ⁵ Eye roll Without bone Practically-free-of- fat (Like IMPS #116D)	Pound	7.20 4.80	1 oz cooked lean meat 1-1/2 oz cooked lean meat	20.9	1 lb AP = 0.45 lb cooked, trimmed, sliced lean meat

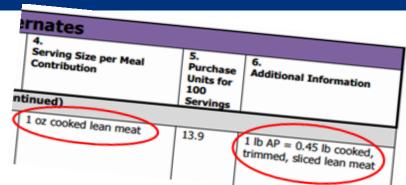
Sometimes you will have an ingredient that does not have a CN label or a PFS, but you still need to know how it credits towards the meal pattern. That's when the Food Buying Guide (FBG) will be useful.

Ex) A recipe calls for 136 oz of Beef Chuck Roast. How many oz equivalents M/MA will this credit for? (On next slide)



Beef Chuck Roast (Example)

Ex) A recipe calls for 136 oz of Beef Chuck Roast. How many oz equivalents M/MA will this credit for?



Step 1: Calculate the Yield:

From the FBG, we can see that 1 lb AP = 0.45 lb cooked, lean meat.

Yield = Credited Amount ÷ Raw Amount







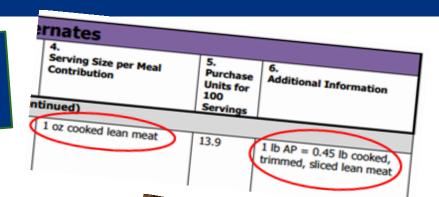
Yield = 0.45 lb ÷ 1 lb = **0.45 or 45%**





Beef Chuck Roast (Example)

Ex) A recipe calls for 136 oz of Beef Chuck Roast. How many oz equivalents M/MA will this credit for?



Step 2: Calculate the Creditable Amount (oz eq.):

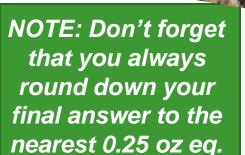
From the FBG, we can also see that 1 oz cooked lean meat credits for 1 oz eq. M/MA.

Creditable Amount = Raw Amount x Yield



Creditable = $\frac{136 \text{ oz}}{\text{Amount}} = \frac{0.45}{\text{raw beef}} \times \frac{0.45}{\text{(yield)}}$

61 oz eq. M/MA





Whole Grain-Rich Requirements

Foods that qualify as whole grain-rich for the school meal programs are foods that contain 100-percent whole-grain OR contain a blend of whole-grain meal and/or flour of which at least 50-percent is whole-grain. Whole grain-rich products must contain at least 50-percent whole-grains and the remaining grain, if any, must be enriched.



Whole Grain-Rich Requirements

Schools can use the following elements as a simple checklist to evaluate if a grain product meets the whole grain-rich (WGR) criteria:

Element 1

The food item must meet the oz equivalent requirements for the grains component as defined by this guidance (i.e. SP 30-2012).

Exhibit A: School Lunch and Breakfast

"Whole Grain-Rich Ounce Equivalency (OZ EQ)
Requirements For School Meal Programs"



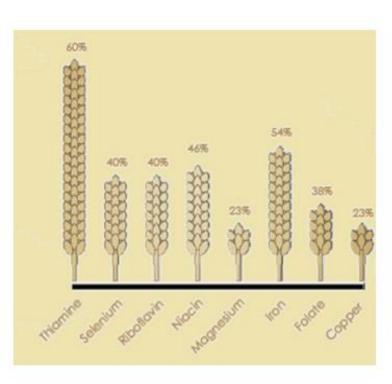
Whole Grain-Rich Requirements

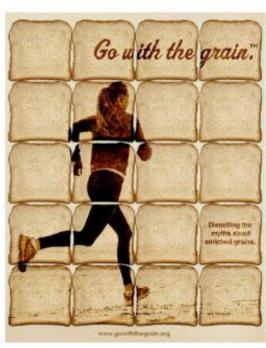
Element 2

The food item must meet the oz equivalent requirements for the grains component as defined by this guidance.

- **a.)** The whole-grain content per oz eq. based on the attached Exhibit A weights must be at least 8.0 grams or more for groups A G. For Groups H and I, the volumes or weights listed must be offered to credit as one oz eq.
 - **b.)** The product includes the following Food and Drug Administration-approved whole-grain health claim on its packaging: "Diets rich in whole-grain foods and other plant foods and low in total fat, saturated fat, and cholesterol may reduce the risk of heart disease and some cancers."
 - c.) The product ingredient declaration lists whole-grains first

Examples of Whole-Grains





- Barley
- Quinoa
- Oatmeal
- Brown Rice
- Whole Wheat
- Whole Rye
- Whole
 Cornmeal
- Cracked Wheat



Whole Grain-Rich Exemption Request Form

- Only 50% of grains need to be whole grain-rich (WGR).
- Waiver has been extended through SY 2016-17
 - SP33-2016: Extension Notice (WGR)
 - Schools with the waiver will have it extended for SY 2016-17
 - Schools without the waiver will have the opportunity to complete it and send it in to our office for approval for SY 2016-17.
 - Whole Grain-Rich Exemption Request Form



Whole Grain-Rich Exemption Request Form



MISSOURI DEPARTMENT OF ELEMENTARY AND SECONDARY EDUCATION
DIVISION OF FINANCIAL AND ADMINISTRATIVE SERVICES – FOOD AND NUTRITION SERVICES

WHOLE GRAIN-RICH EXEMPTION REQUEST FORM

DIRECTIONS

Fax or email the completed form to: Food and Nutrition Services (FNS) Section at (573) 526-3897 or email to foodandnutritionservices@dese.mo.gov Subject Line: WHOLE GRAIN-RICH EXEMPTION REQUEST FORM

USDA memo SP 20-2015 allows Local Education Agencies (LEAs) the ability to request an exemption from the whole grain-rich requirement for school years (SY) 2014-2015 and 2015-2016.

LEAs must request exemptions to specific products, if the LEA can demonstrate hardship(s) in procuring, preparing, or serving compliant whole grain-rich products that are acceptable to students. LEAs granted the exemption must comply with the SY 2013-2014 requirement to offer at least half of the grain items as whole grain-rich. LEAs may retain the previously approved pasta exemptions and do not need to reapply for the pasta items already approved.

List each product and provide written justification or other documented evidence (e.g. photos, meal count records). LEAs must submit this form to request the exemption. An email will be returned to the Authorized Representative regarding approval or denial of the exemption.

Questions regarding this form contact (573) 751-3526 or foodandnutritionservices@dese.mo.gov.

LEA INFORMATION				
LEA AGREEMENT NUMBER	LEA NAME			
Product	Reasons for requesting exemptions (check all that apply and provide written justification and/or documentation)			
Name:	Financial hardship			
	Limited product availability			
Manufacturer:				
	Unacceptable product quality			
DEPARTMENT USE ONLY	Poor student acceptance			
Approved	Other			
Denied				
	Plan to achieve future compliance			



Crediting Grain Products

- Baked goods, such as breads, biscuits, bagels, etc., require 16 grams of creditable grain ingredient in order to provide 1 oz equivalent of grain.
- Cereal grains such as oatmeal, pasta, and brown rice, a 1 oz eq. is 28 grams of dry product. Since these grains are served cooked and water is added during preparation, the cooked volume eq. is ½ cup cooked cereal, pasta, or rice.
- For ready-to-eat breakfast cereal, 28 grams or 1.0 ounce of product is considered a 1 oz eq.

Whole-Grain Roll (Example)

- Store-bought vs. In-house
 - This example will show the difference in calculating the grain contribution of a roll that was purchased from the store, and one made from scratch, on-site.
 - SP 30-2012; Exhibit A: Group B
 - When crediting a store-bought product, which you do not know the recipe for, you'll want to refer to Exhibit A of SP 30-2012. This allows you to credit based on the weight of the finished product.
 - For any products made in-house, you'll need to calculate the grain contribution based on the recipe.
 - Remember: 16 grams of grain = 1 serving (1 oz eq.)

Store-Bought Roll

Nutrition Facts

Serving Size 1 Rall (419) Servings per container 18

Calories 210

Amounts per Serving % of I	% of Daily Value	
Total Fat 10g	15%	
Cholesterol 45mg	15%	
Sodium 300mg	13%	
Total Carbohydrates 36g	13%	
Sugars 17g		
Dietary Fibers 2g	8%	
Proteins 2g		

Not a significant source of dietary calcium, fiber, iron, vitamin A, Vitamin C.

Exhibit A: Group B

1 oz eq. = 28 gm or 1.0 oz



42 gm / 28 gm = 1.5 oz



$$1.5 \text{ oz roll} = 1.5 \text{ oz eq. grain}$$



^{*} Percent Daily Values (DV) are based on a 2,000 calorie diet.

Store-Bought Roll

Healthy Life Original 100% Whole Wheat Whole Grain Bread

Amount Per S	do .				even
Calories		-	ories!		
Calories		-	ories !		
- Control	-	90	-	ally V	-
Total Fat	00.00		74.6	0%	0%
Saturated F	-	a		0%	0%
Trans Fat 0	Additional Public	-		-	-
Polyunsatu	A	at Oc	2.0a		
Monounsat		-			
Cholester	000000000		ALC: No.	0%	0%
Sodium 15	and the last of th			6%	3%
Total Carbo	ohydra	te 1	69.89	5%	3%
Dietary Fib				20%	12%
Sugars 2g.	19			117,000	
Protein 5	g.2g				
Marie 1	an day	400			Ani
The second secon	0% 0%		tamin (-	0%
	0% 4% % 4%	In	n boflavir		2%
The second second	3% 2%		nic Acid	-	0%
Tangent A		-		-	
* Percent Daily calorie diet. Y	but daily	ıalut	is may b	a higher	000
		-	director may	note:	
lower depend	Calorie		2.000		00

NO Bromate
NO Hydrogenated Oil
O Grams Trans Fats
NO Saturated Fats

INGREDIENTS: WATER, 100% WHOLE GRAIN WHOLE WHEAT FLOUR, SOY FIBER AND/OR WHEAT FIBER AND/OR SUGAR CANEFIBER, WHEAT GLUTEN, YEAST, BROWN SUGAR, CONTAINS 2% OR LESS OF THE FOLLOWING: MOLASSES, SALT, DOUGH CONDITIONERS (MONO & DIGLYCERIDES, SODIUM STEAROYL LACTYLATE, ETHOXYLATED MONO- DIGLYCERIDES, ASCORBIC ACID, CALCIUM PEROXIDE, AZODICARBONAMIDE), CALCIUM PROPIONATE (TO PREVENT SPOILAGE), GUAR GUM, YEAST NUTRIENTS (CALCIUM SULFATE, CALCIUM CARBONATE, AMMONIUM SULFATE), FUMARIC ACID, WHEAT STARCH, PALM OIL, SOY LECITHIN.

LEWIS BAKERIES, INC.

Allergy Advisory: Produced on the same bakery equipment as baked goods containing milk, eggs, or nuts. Therefore, this product may inadvertently contain milk, eggs, or nuts to which some people may be allergic.

GENERAL OFFICES: EVANSVILLE, IN 47710

While we make every effort to post the most current product nutrition facts and ingredients on this web site, your best source of product information is what is printed on the package you purchase.

CONTAINS: WHEAT, SOY.

- The product's ingredient list specifically has a whole grain listed first (non mixed dishes (e.g. breads and cereals)
- If the food item is a mixed dish (e.g. lasagna) a whole grain must be the primary grain ingredient by weight (listed first).
- If the first ingredient is water, a whole grain must be listed as the second ingredient, and the product will still meet WGR criteria.

Calculation Activity: In-House Whole-Grain Hot Roll

Ingredients

Number of portions: 175

Size of Portion: 1.5 oz

Flour, Whole Wheat	5 1/4 LB
Flour, All Purpose, Enriched, White	4 ¾ LB
Water	1 Gal
Milk, Dry, Nonfat	2 CUP
Margarine, melted	3 CUP
Sugar, Granulated	2 3/4 CUP
Salt	1/4 CUP
Yeast, Baker's, Active Dry	1 CUP
Margarine	½ CUP

Remember: 16 grams of creditable grains credits for 1 oz eq. grain.

Recipe HACCP Process: #2 Same Day Service

- Add hot tap water to the mixing bowl, add melted margarine, and all other ingredients except flour
- 2. Mix for 30 seconds on low speed to blend
- Gradually add flour, mixture should be soft consistency
- 4. Cover and allow dough to rise until double in size
- Punch down dough-pinch 1 oz balls, shape for rolls
- 6. Place on cookie sheets to rise again until double
- Bake at 325 degrees until done-golden brown in color. Approximate time 9-12 minutes
- 8. Lightly brush with melted margarine when removed from oven

Calculation Activity: In-House Whole-Grain Hot Roll

Recipe	Ingredients per 175 Servings	Quantity of Grains given in LBS	X grams (454 per lb)
Whole Grain Hot Roll	Flour, Whole Wheat	5 lbs 4 oz	5.25 lb x 453.6 g = 2381.4 g
	Flour, All Purpose, Enriched, White	4 lbs 12 oz	4.75 lb x 453.6 g = 2154.6 g
		Calculations	Flour: 4536/ 16 g = 283.50 servings of flour per 175 servings of rolls 283/175 servings = 1.6 servings round .6 down to the nearest ½ serving: .50 1 roll provides 1.5 servings of Grains/Breads



- Three tools have been developed to assist in converting/crediting grains and meat/meat alternates (M/MA).
 - Creditable Grains in Recipes Converter
 - This tool is to be used when calculating the grain contributions for products made from recipes/scratch.
 - □ SP 30-2012 Converter
 - This tool focuses on Exhibit A of this memo, which shows how, by weight, commercial grain products are credited towards the meal pattern.
 - Standardized Recipe Converter
 - This tool allows someone to enter all of the ingredients of a recipe, and it will calculate the M/MA, grain, and veg. contribution to the meal pattern, per serving.





Food & Nutrition Services

Home » Financial & Admin. Services

The Food and Nutrition Services Section administers the USDA Food
Distribution Program and the following USDA Child Nutrition Programs:
National School Lunch Program (NSLP), School Breakfast Program, Special Milk
Program, and the Fresh Fruit and Vegetable Program. Under the NSLP, the
After School Snack Program and Seamless Summer Option are also available.
The programs are operated in public, non-public, and residential child care
institutions. The goal of the Food and Nutrition Services Section is to providing
safe food and technical assistance to ensure well balanced nutritious meals are
served to the students of Missouri.

Food and Nutrition Services Contact Information

Quick Links

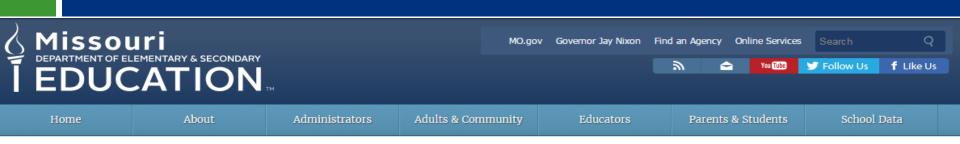
- News and Updates
- Administrative State Agency Review
- Civil Rights
- Community Eligibility
 Provision (CEP)
- Farm to School
- Food Allergy Information

Meal Pattern

- Newsletters, Webinars & Workshops
- Procurement
- Professional Standards
- Reimbursement Rates
- Serving with Success

Financial & Admin. Services

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 - Wellness



Meal Pattern

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· 6 Cent Certification Resources

Meal Pattern

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New Meal Pattern

Home » Financial & Admin. Services » Food & Nutrition Services

CN Label Documentation and Product Formulation Statements

- Administrative Review CN Labels Webinar
- CN Label Verification Report
- CN Label Manufacturers Report
- SP-27-2015: Administrative Review Process Regarding the Child Nutrition (CN) Label, Watermarked CN Label and Manufacturer's Product Formulation Statement
- SP-11-2015(v.2): CN Labels Copied with a Watermark Acceptable Documentation
- Tip Sheet for Accepting Processed Product Documentation
- Tip Sheet for Evaluating a Manufacturer's Product Formulation Statement (PFS) 🔯
- TA 07-2010 Guidance for Accepting Processed Product Documentation for Meal Pattern Requirements (MPR) REVISED 11-26-2014
 - Product Formulation Statement for Meat/Meat Alternate Product
 - Product Formulation Statement for Vegetables
 - Product Formulation Statement for Fruits
 - Product Formulation Statement for Grains 🔯

Meal Pattern Information

- Creditable Grains in Recipes Converter
- SP-30-2012 Converter 👰
- Standardized Recipe Converter

Financial & Admin. Services

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Creditable Grains In Recipe Converter

* Must enter information into pink	field.							
1. Creditable Grain Ingredient	2. Qua	antity	3. Total	Grams (g)	5. Total grams divided by number of portions in recipe:			
Whole Wheat Flour		cups		0	Total grams of creditable grains from step 4 0.00			
Enriched White Flour		cups		0	Enter number of portions			
Regular Rolled Oats		cups		0	Grams of creditable grains per portion #DIV/0!			
Quick-cooking Oats		cups		0				
Regular Cornmeal		cups		0	6. Divide grams of creditable grains per portion			
	Tot	al Grams		0	Grains/serving (oz. eq) #DIV/0!			
Whole Wheat Flour		ounces		0				
Enriched White Flour		ounces		0	7. Round down to the nearest 0.25 grains/serving			
Regular Rolled Oats		ounces		0	Ounce equivalent grains #DIV/0!			
Quick-cooking Oats		ounces		0				
Regular Cornmeal		ounces		0	8. Is this whole-grain rich? (at least 50% whole-grain)			
	Tot	al Grams		0	Grams of whole-grains / grams of other grains #DIV/0!			
Whole Wheat Flour		lbs		0				
Enriched White Flour		lbs		0	YES			
Regular Rolled Oats		lbs		0	NO			
Quick-cooking Oats		lbs		0				
Regular Cornmeal		lbs		0	List of Grain Conversions (for reference only)			
	Tot	al Grams		0	Number of pounds of ingredient X 453.6 grams			
					Number of ounces of ingredient X 28.35 grams			
4. Grand Total Grams of Grains 0.00				.00	Number of cups of whole wheat flour X 120 grams			
					Number of cups of enriched white flour X 125 grams			
					Number of cups of regular rolled oats X 81 grams			
					Number of cups of quick-cooking oats X 81 grams			
					Number of cups of regular cornmeal X 122 grams			

Creditable Grains In Recipe Converter (Example)

Ingredients Number of portions: 175 Size of Portion: 1.5 oz

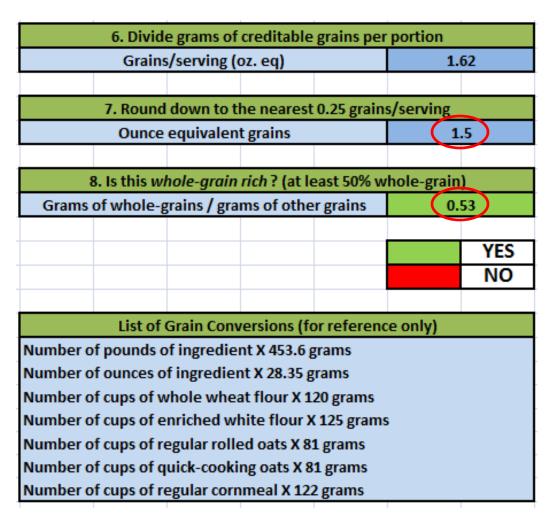
Flour, Whole Wheat	5 ¼ LB
Flour, All Purpose, Enriched, White	4 ¾ LB
Water	1 Gal
Milk, Dry, Nonfat	2 CUP
Margarine, melted	3 CUP
Sugar, Granulated	2 3/4 CUP
Salt	1/4 CUP
Yeast, Baker's, Active Dry	1 CUP
Margarine	½ CUP

4.6 11.11.6 1.1. 11.1	2.0		27115 ()				
1. Creditable Grain Ingredient	2. Qua	intity	3. Total Grams (g)				
Whole Wheat Flour		cups	0				
Enriched White Flour		cups	0				
Regular Rolled Oats		cups	0				
Quick-cooking Oats		cups	0				
Regular Cornmeal		cups	0				
	Tot	al Grams	0				
Whole Wheat Flour		ounces	0				
Enriched White Flour		ounces	0				
n gular Rolled Oats		ounces	0				
Quick-co. king Oats		ounces	0				
Regular Cornmed		ounces	0				
	Tot	al Grams	0				
Whole Wheat Flour	5.25	lbs	2,381				
Enriched White Flour	4.75	lbs	2,155				
Regular Rolled Oats		lbs	0				
Quick-cooking Oats		lbs	0				
Re _a dar Cornmeal		lbs	0				
	Tot	al Grams	4,536				
4. Grand Total Grams of Grains 4,536.00							

5. Total grams divided by number of partions in recipe:									
Total grams of creditable grains from step 4	4,536.00								
Enter number of portions	175								
Grams of creditable grains per portion	25.92								



Creditable Grains In Recipe Converter (Example)



Once we've entered in the pounds (lbs) of flour, and the number of servings (175), it automatically calculates, and rounds down to the nearest 0.25 oz eq., that there are 1.5 oz eq. grain in each roll.

The tool will also calculate the percentage of whole-grains in this product, and tell you whether or not it meets the WGR criteria (i.e. at least 50% whole-grain by weight). Green means "YES" and red means "NO". We can see that this product IS WGR, because it is 53% whole-grain.

SP 30-2012 Converter

			Whole	Grain-Ri	ch Equ	ivalenc	v (O7 F	O) Roc	ujreme	nts for School	Moal Pr	ograme	,		
			vviiole	Oralli-Mi	cii Equ	ivalenc	y (OZ L	Q) Nec	dill ellle	1113 101 3011001	ivical FI	ogranis	,		
SP 30-2012: Grain Requirements for the Na	tional So	nool Lune	h Drogram	and School											
Breakfast Pi		iooi Lunc	ii Fiografi	i aliu scilooi		-			Grai	n Converter (SP 30-2	2012)			
GROUP A		OZ EQ F	OR GROUP	P A		*Enter w	eight of gr	ain item in	nto the RED	box and it will conver	t your item i	into "ounce	equivalencies	" (oz ed	q) for you!
Bread type coating	1	oz eq	= 22 gm	or 0.8 oz			It will then	round dou	vn to the ne	arest 0.25 oz eq in the	green box, o	and that is	the creditable	amoun	t.
Bread sticks (hard)	3/4	oz eq	= 17 gm	or 0.6 oz					ı	tem Weight	Ounce Equ	ivalencies	Rounded dov	vn to ne	earest 0.25
Chow mein noodles	1/2	oz eq	= 11 gm	or 0.4 oz						grams	0.00	OZ EQ	0.00		OZ EQ
Savory crackers (saltines & snack crackers	1/4	oz eq	= 6 gm o	r 0.2 oz			Group A			ounces	0.00	OZ EQ	0.00		OZ EQ
Croutons															
Pretzels (hard)															
Stuffing (dry) Note: weights apply to						-				grams	0.00	OZ EQ	0.00		OZ EQ
bread in stuffing							Group B			ounces	0.00	OZ EQ	0.00		OZ EQ
GROUP B			OR GROUP												
• Bagels	1	oz eq	= 28 gm								0.00	07.50	0.00		07.50
Batter type coating Biscuits	3/4 1/2	oz eq	_	or 0.75 oz		-	C C			grams	0.00	OZ EQ OZ EQ	0.00		OZ EQ OZ EQ
Breads (sliced whole wheat, French, Italia	1/4	oz eq	= 14 gm o				Group C			ounces	0.00	UZ EQ	0.00		UZ EQ
Buns (hamburger and hot dog)	1/4	oz eq	= / gm o	1 0.25 02					1						
Sweet Crackers (graham crackers - all										grams	0.00	OZ EQ	0.00		OZ EQ
shapes, animal crackers)							Group D			ounces	0.00	OZ EQ	0.00		OZ EQ
• Egg roll skins							Group D			ounces	0.00	OZZZ	0.00		OL LQ
• English muffins															
Pita bread (whole wheat or whole grain-ri										grams	0.00	OZ EQ	0.00		OZ EQ
Pizza crust							Group E			ounces	0.00	OZ EQ	0.00		OZ EQ
Pretzels (soft)															
Rolls (whole wheat or whole grain-rich)															
Tortillas (whole wheat or whole corn)										grams	0.00	OZ EQ	0.00		OZ EQ
 Torilla chips (whole wheat or whole corn) 							Group F			ounces	0.00	OZ EQ	0.00		OZ EQ
Taco shells (whole wheat or whole corn)															
GROUP C		OZ EQ F	OR GROUP	PC											
Cookies (plain - includes vanilla wafers)	1	oz eq	= 34 gm c							grams	0.00	OZ EQ	0.00		OZ EQ
Cornbread	3/4	oz eq	= 26 gm c				Group G			ounces	0.00	OZ EQ	0.00		OZ EQ
Corn muffins	1/2	oz eq	= 17 gm c												
• Croissants	1/4	oz eq	= 9 gm or	0.3 oz											
• Pancakes										cups (cooked)	0.00	OZ EQ	0.00		OZ EQ
Pie crust (dessert pies, cobbler, fruit							Group H			ounces (dry)	0.00	OZ EQ	0.00		OZ EQ
turnovers, and meat/meat alternate pies)					l										
Waffles GROUP D		07.50.5	OR GROUP	2 D	-	þ				cups (flakes/sounds	0.00	OZ EQ	0.00		OZ EQ
GROOP D		UZ EQ F	OR GROUP	U						cups (flakes/rounds	0.00	UZ EQ	0.00		UZ EQ

SP 30-2012 Converter (Examples)

Group A



Nutrition Facts Serving Size 6 crackers (28g) Servings Per Container Al **Amount Per Serving** Calories 120 Calories from Fat 35 % Daily Value* Total Fat 4g 6% Saturated Fat 0.5q 3% Trans Fat 0a Polyunsaturated Fat 2g Monounsaturated Fat 1g Cholesterol 0mg 0% Sodium 120mg 5% Potassium 120mg 3% Total Carbohydrate 20g 7% Dietary Fiber 3g 12% Sugars 0g Protein 3g

INGREDIENTS: WHOLE GRAIN WHEAT, VEGETABLE OIL (SOYBEAN OR CANOLA OIL), ONION POWDER, SALT, DRIED CARROTS, PARSLEY FLAKES, AUTOLYZED YEAST EXTRACT, GARLIC POWDER.

CONTAINS: WHEAT.

Group B

Sara Lee[®] Classic

100% Whole Wheat Bread

Nutrition Facts

Serving size 1 slice (26g) Servings per container 22

Amount Per Serving	1 slice	2 slices
Calories	60	130
Calories from Fat	10	15
		% Daily Value
Total Fat 1g	2%	2%
Saturated Fat Og	0%	0%
Trans Fat Og		
Polyunsaturated Fat Og		
Monounsaturated Fat Og		
Cholesterol Omg	0%	0%
Sodium 120mg	5%	10%
Total Carbohydrate 12g	4%	8%
Dietary Fiber 2g	8%	16%
Sugars 1g		

Whole wheat flour, vater, wheat gluten, sugar, yeast, soybean oil, salt, molasses, wheat bran, calcium propionate (preservative), datem, monoglycerides, calcium sulfate, cellulose gum, monocalcium phosphate, cornstarch, soy lecithin, citric acid, grain vinegar, potassium iodate.

Group C



Nutrition Facts

Serving Size 2 Waffles (76g) Servings Per Container 3

corringo r or com	
Amount Per Serving	
Calories 130	Calories from Fat 15
	% Daily Value*
Total Fat 1.5g	2%
Saturated Fat Og	0%
Trans Fat Og	
Cholesterol Omg	0%
Sodium 250mg	10%
Total Carbohydrate	26g 9 %
Dietary Fiber 7g	28%
Sugars 2g	
Protein 5g	
Vitamin A 0% •	Vitamin C 0%

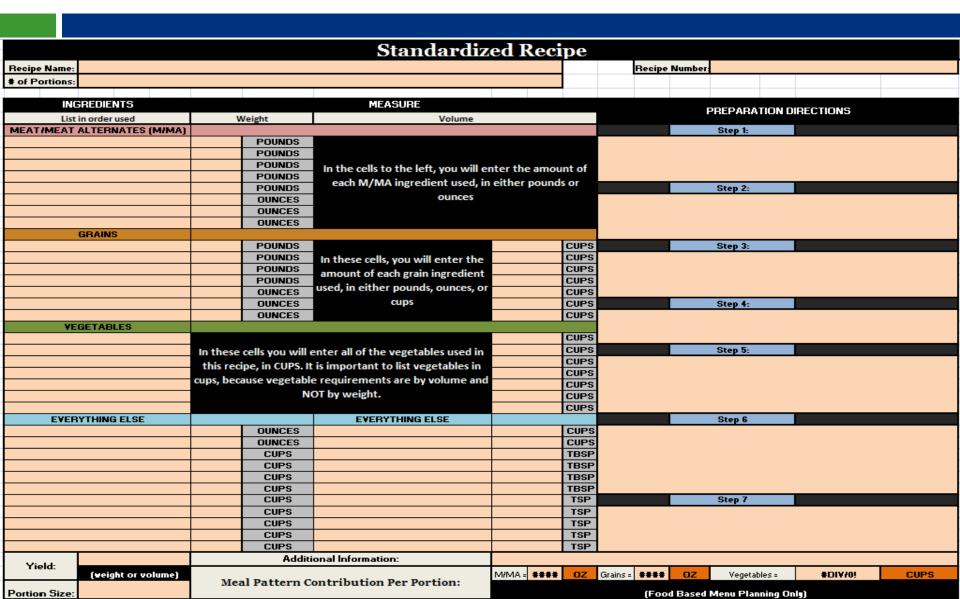
Water, Van's 8 Whole Grains Mix (Whole Wheat, Oat, Barley, Brown Rice, Dark Rye, Quinoa, Amaranth And Millet Flours), Oat

Calcium

SP 30-2012 Converter (Examples)

SP 30-2012: Grain Requirements for the National School Lunch Program and School			I	Grain Converter (SP 30-2012)						
Breakfast P	rogram			Grain Converter (3F 30-2012)						
GROUP A	0	Z EQ FOR GROUP A		*Enter weight of grain item in			-			
Bread type coating		eq = 22 gm or 0.8 oz		It will then round do		arest 0.25 oz eq in the	 			
Bread sticks (hard)		eq = 17 gm or 0.6 oz				tem Weight			Rounded down to n	
Chow mein noodles	1/2 02	eq = 11 gm or 0.4 oz		\rightarrow	28.00	grams	1.27	OZ EQ	1.25	OZ EQ
 Savory crackers (saltines & snack crackers 	1/4 0/	eq = 6 gm or 0.2 oz		Group A		ounces	0.00	OZ EQ	0.00	OZ EQ
Croutons										
Pretzels (hard)										
 Stuffing (dry) Note: weights apply to 				>	26.00	grams	0.93	OZ EQ	0.75	OZ EQ
bread in stuffing				Group 2		ounces	0.00	OZ EQ	0.00	OZ EQ
GROUP B	0	Z EQ FOR GROUP B								
Bagels		eq = 28 gm or 1.0 oz								
Batter type coating		eq = 21 am or 0.75 oz		7	76.00	grams	2.24	OZ EQ	2.00	OZ EQ
Biscuits	1/2 02	2 1 8 11 01 0.5 02		Group C		ounces	0.00	OZ EQ	0.00	OZ EQ
 Breads (sliced whole wheat, French, Italia 	1/4 02	eq = 7 gm or 0.25 oz								
Buns (hamburger and hot dog)										
 Sweet Crackers (graham crackers - all 						grams	0.00	OZ EQ	0.00	OZ EQ
shapes, animal crackers)				Group D		ounces	0.00	OZ EQ	0.00	OZ EQ
• Egg roll skins										
English muffins										
 Pita bread (whole wheat or whole grain-ri- 						grams	0.00	OZ EQ	0.00	OZ EQ
Pizza crust				Group E		ounces	0.00	OZ EQ	0.00	OZ EQ
Pretzels (soft)										
 Rolls (whole wheat or whole grain-rich) 										
 Tortillas (whole wheat or whole corn) 						grams	0.00	OZ EQ	0.00	OZ EQ
 Torilla chips (whole wheat or whole corn) 				Group F		ounces	0.00	OZ EQ	0.00	OZ EQ
Taco shells (whole wheat or whole corn)										
GROUP C	0	Z EQ FOR GROUP C								
 Cookies (plain - includes vanilla wafers) 		eq = 34 gm or 1.2 oz				grams	0.00	OZ EQ	0.00	OZ EQ
Cornbread		eq = 26 gm or 0.9 oz		Group G		ounces	0.00	OZ EQ	0.00	OZ EQ
Corn muffins		eq = 17 gm or 0.6 oz								
Croissants	1/4 02	eq = 9 gm or 0.3 oz								
• Pancakes						cups (cooked)	0.00	OZ EQ	0.00	OZ EQ
Pie crust (dessert pies Jobbler, fruit				Group H		ounces (dry)	0.00	OZ EQ	0.00	OZ EQ
turnovers, and meat / neat alternate pies)										
• Waffles										

Standardized Recipe Converter



Standardized Recipe Converter

	Ground Beef Converter										
Туре:	Yield:	Raw Amount Used (lbs):	Creditable Amount (oz. eq)	OZ EQ M/MA Per Portion	Creditable Amount (oz eq) per portion						
No more than 30% fat	0.75		0.00	#DIV/0!	*DIV/0!						
No more than 26% fat	0.72		0.00	#DIV/0!	# DIV/0!						
No more than 24% fat	0.73		0.00	#DIV/0!	# DIV/0!						
No more than 20% fat	0.74		0.00	#DIV/0!	#DIV/0!						
No more than 15% fat	0.75		0.00	#DIV/0!	*DIV/0!						
No more than 10% fat	0.76		0.00	#DIV/0!	#DIV/0!						

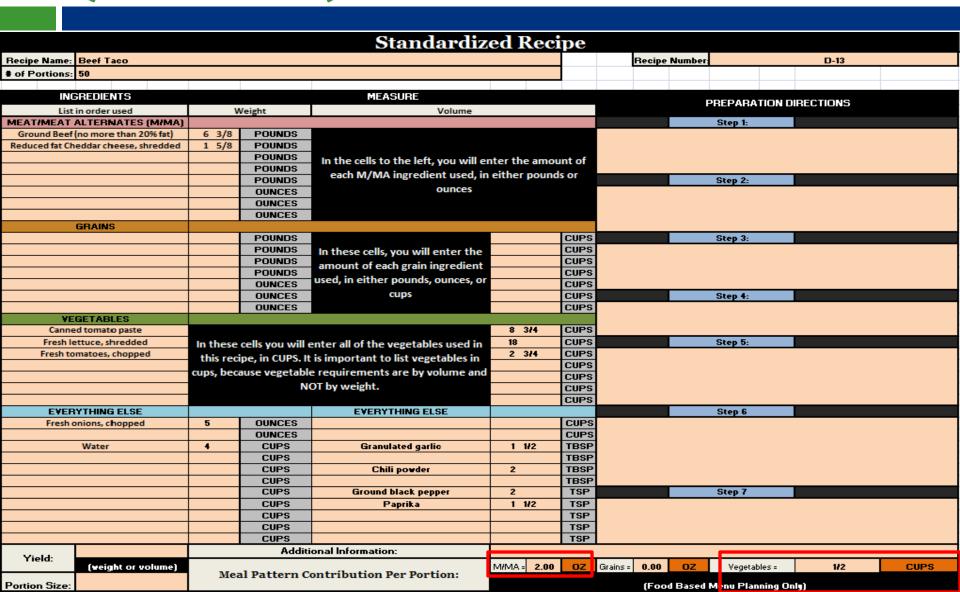
Meat/Meat Alternate (M/MA) OZ EQ Converter										
Product Name	Raw Amount Used (lbs)	Yield (%)	Total Ounce Equivalencies (M/MA)	OZ EQ M/MA Per Portion	Creditable Amount (oz eq) per portion					
			0.00	#DIV/0!	*DIV/0!					
			0.00	#DIV/0!	#DIV/0!					
			0.00	#DIV/0!	# DIV/0!					
			0.00	#DIV/0!	# DIV/0!					
			0.00	#DIV/0!	#DIV/0!					
			0.00	#DIV/0!	*DIV/0!					



If enterting the "Raw Amount Used" in ounces rather than pounds, please refer to the table below for converting from ounces to pounds.

	Beans/Peas Converter (ONLY if counting as M/MA^*)					
Ounces M/MA Used	Pounds M/MA Used	As Fraction	Cups of Beans/Peas (Legumes) Used:	Serving Size per Meal Contribution (1	OZ EQ M/MA per portion	Creditable Amount (oz eq) per portion
-	0.00	0			#DIV/0!	#DIV/0!
	0.00	o		1/4 cup	#DIV/0!	#DIV/0!
-	0.00	0			#DIV/0!	#DIV/0!

Standardized Recipe Converter (Example)



Standardized Recipe Converter (Example)

In the "Ground Beef Converter" we'll enter the 6 3/8 lbs of ground beef (no more than 20% fat) It'll automatically calculate oz eq. and divide by the # of servings.

Ground Beef Converter										
Type:	Yield:	Raw Amount Used (lbs):	Creditable Amount (oz. eg)	OZ EQ M/MA Per Portion	Creditable Amount (oz eq) per portion					
No more than 30% fat	0.75		0.00	0.00	0.00					
No more than 26% fat	0.72		0.00	0.00	0.00					
No more than 24% fat	0.73		0.00	0.00	0.00					
No more than 20% fat	0.74	6.38	75.48	1.51	1.50					
No more than 15% fat	0.75		0.00	0.00	0.00					
No more than 10% fat	0.76		0.00	0.00	0.00					

In the "M/MA OZ EQ Converter" we'll enter the 1 lb 10 ounces of cheese. Since 1 ounce of cheese credits as 1 oz eq. M/MA, the yield is 100% or "1". Again, it will calculate the oz eq. and divide by the # of servings.

Meat/Meat Alternate (M/MA) OZ EQ Converter

Product Name	Raw Amount Used (lbs)	Yield (%)	Total Ounce Equivalencies (M/MA)	OZ EQ M/MA Per Portion	Creditable Amount (oz eq) per portion
Shredded Cheddar Cheese	1 5/8	1.00	26.00	0.52	0.50
			0.00	0.00	0.00





Questions?

Thank You!



DESE Food & Nutrition Services (573) 751-3526